SUBJ: AIR TRAFFIC OPERATIONAL CODING SYSTEM

1 PURPOSE, To make necessary revisions to the coding and assignment of several types of Air Traffic Operational Codes used in the National Airspace System **(NAS)** by air traffic control personnel and in related activities. This revision is issued to identify the present and future coding schemes and to minimize the input of encoded and decoded data.

2. DISTRIBUTION. This order is distributed to selected offices in Washington, regional headquarters, Mike **Monroney** Aeronautical Center and FAA Technical Center; also to **all** Air Traffic facilities, Flight Inspection District Offices, and inter-**ested** aviation public,

3. CANCELLATION, Order **7350.2B** dated January **30, 1974,** is cancelled.

4. BACKGROUND,

   a. **A wide** variety **of** operational codes are used in the **NAS.** There are, for example, codes for location names (identifiers) which include navigation aids **(NAVAID's),** airports, intersections, **DME** fixes, **ILS** outer markers, area navigation waypoints, route turning points, boundary crossing points, Federal airways, Jet Routes, special use airspace, special procedures **(SID's,** STAR's), computer only fixes, controlled **airspace** areas, aircraft types, aircraft operator designators, and others. Many of these codes are required for use by controllers **and** pilots and must be **made** available through charts **and** publications.

   b. The implementation of automated data processing systems for the Air Route **Traffic** Control Centers **(ARTCC) and** the Flight Service Stations **(FSS)** has required that **a** great number of additional locations be identified for the internal use of the computer Flight Plan Processing Program, Flight Service Automation System **(FSAS),** **automated** charting, **and** various other automated programs. **The ARTCC and FSS auto-**mation has required **many** additional locations be uniquely identified. This requires that identifiers for all locations be assigned on a centralized basis.

   c. The assignment of **a** five-letter pronounceable name/code to all intersections, **DME** fixes, waypoints, route turning points, boundary crossing points, and **ATC** coordination fixes is nearly complete. This has released the number-letter-letter series of identifiers for use elsewhere.

d   The Operations Division (AAT-400) has developed an overall plan for all Air Traffic Operations Codes which provides a unique format for each type of requirement (see Appendix I). Each series of codes in the plan has the capacity to provide nonduplicating codes for many years. The plan also makes provision for reserving blocks of codes for future but presently unknown requirements.

5. ACTION.

    a. All unassigned names retained by the Flight Inspection Field Offices or the ARTCC's shall be returned to AAT-430 upon receipt of this order. New or changes to five letter name/codes may be requested by telephone.

    b. When requesting a location identifier (see Section 3, Handbook 7350.4) send AAT-430 a written request including all pertinent data insuring accurate geographic locations. Emergency requests only may be handled by telephone and will be dealt with on a case-by-case basis.

    c. Related forms and publications are to be amended accordingly at the source of responsibility. (For example, 8260.2, etc.)

    d. Notify AAT-430 by letter, memo or message when a temporary assignment is no longer needed or its use is to be extended.

    e. Location Identifiers shall not be reassigned by AAT-430 for a period of 1 year after cancellation.

6. DEFINITION, An "operational code" is an abbreviation, contraction, or coined combination of letters and/or numbers used for brevity in the NAS. Excluded from this order are teletypewriter and weather symbols, ICAO codes, and codes of the ATC Radar Beacon System (ATCRBS).

7 PROBLEM, Increasing use of codes in the NAS can result in duplication and serious operational problems in our automated environment unless centrally controlled.

8. CHANGES TO THE PLAN. New name or changes of names for an intersection/fix or ILS outer marker must be requested directly from AAT-430. The FSAS requirements are being developed and the unused number-letter-letter codes shall be reserved for that program.

R. J. VAN VUREN
Director, Air Traffic Service

APPENDIX 1. AIR TRAFFIC CODING SYSTEM

(Operational Codes)

Major Categories   Official Source Publication

   I.   Location Identifiers   Handbook 7350.4
       (Assigned by AAT-400)

  II.   Special Procedures   Handbook 7350.4
       (Assigned by AAT-400)
       SID's, STAR's

 III.   Fix and RNAV Waypoint Name/Codes   Handbook 7350.4 and
       (Assigned by AAT-400)   Federal Register-Compulsory
                                                 Fixes (Annually)

  IV.   Airspace Element   Federal Register (Annually)
       (Assigned by AAT-200)   Federal Register (56-day cycle)
       Airways, Routes, Areas,
       Control Areas

   V.   Coded Routes (military)   Department of Defense Flight
       (Assigned by AAT-300)   Information Publication, Area
       Aerial Refueling, Military Training   Planning.
       Routes, etc.   Military Training Routes AP/1B

  VI.   Aircraft Types   Handbook 7340.1
       (Assigned by AAT-400)

 VII.   Aircraft Company Designators   Handbook 7340.1
       (Assigned by AAT-400)

VIII.   Word Contractions   Handbook 7340.1
       (Assigned by AAT-400)

The detailed coding for each category is shown on succeeding pages.

These codes, when assigned, are authorized for use on charts, Flight Information publications, written records, NAS computers, and other communications media.

CATEGORY I

LOCATION IDENTIFIERS (AAT-430)	CODE STRUCTURE

A. Major Airports   LLL

B. Minor Airports (U.S.)   LNN, NLN, NNL,
                                                    LLNN, NLLN, NNLL

C. NAVAID's (U.S.)   LLL

D. Intersection/DME Fixes (U.S.)

   Pronouceable name   LLLLL

E. RNAV Waypoints

   Pronouceable name   LLLLL

F. FSAS Requirements   NLL

G. Computer-only Fixes   NNNNN**

   **10,000 - 15,000 High Altitude   NOTE. There are times when
   Controller Chart Supplements   these fixes are common to
                                                    several strata (RNAV, High
   15,001 - 29,999 Low Altitude   and Low Altitude, etc.) They
   Controller Chart Supplements   will have a unique code within
                                                    the block of numbers appropriate
   30,000 - 64,999 Unused   to the Altitude.

   65,000 - 69,999 Special Local
   ARTCC Use

   70,000 - 79,999 NWS Blocks Allocated
   to NWS

   80,000 - 90,999 Unused

   91,000 - 91,999 Block Allocated to NWS

   92,000 - 99,499 Unused

   99,500 - 99,999 All Facilities
   Temporary Local Block

H. V/STOL - ILS   NNN

I. ICAO Indicators LLLL

J. Canadian Airports/NAVAIDs ...... LL, LLL,
NL, LNL, LLN

AAAAAN·AAAAA
AAAAA·AAAAAN

2 to 5 letters or letter/
number combination

CATEGORY II

SPECIAL PROCEDURES (AAT-430)

A. SIDs

B. STARs

CATEGORY III

FIX AND RNAV WAYPOINT NAME (AAT-430)

A. Five-Letter Pronounceable Names.

CATEGORY IV

AIRSPACE ELEMENTS (AAT-200)   CODE STRUCTURE

A. Airways/Routes

  (1) Colored   A/R/GB-NN

  (2) Victor   V-NNN$_c$L)

  (3) Jet   J-NNN(L)

  (4) RNAV   J V-NNNN R

B. Areas

  (1) Restricted   R-NNNN(L)

  (2) Prohibited   P-NNN

  (3) Warning   W-NNN$_c$L)

  (4) Alert   A-NNN$_c$L)

C-NNNN

(Dashes, parentheses and spaces are not actually used in computer input data.)

C. Control Areas

CATEGORY V
CODES ROUTES (Military) (AAT-300)

CODE STRUCTURE

A. Aerial Refueling

AR-NNN(L)

B. Military Training Route

IR-NNN
VR-NNN
VR-NNNN

(Dashes, parentheses and spaces are not actually used in computer input data.)

NOTE - By international agreement, these codes may not exceed 4 characters.

CATEGORY VI
AIRCRAFT TYPES (AAT-430)

CODE STRUCTURE

AAAA →

CATEGORY VII
CIVIL AIRCRAFT COMPANY DESIGNATORS (AAT-430)
(Aircraft Identification Code)

LL'/NNNN

OPERATOR CODE   FLIGHT NO.
(2-3 letters)   (1-4 Nos.)

L →

CATEGORY VIII
WORD CONTRACTIONS (AAT-430)

A →

LEGEND: L - Letter
A - Letter/number combinations
→ Variable length data field
N - Number

LETTER-NUMBER (L/N) COMBINATIONS

<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
LL*	LLL*	LLLL*	LLLLL*
	NNN*	NNNN	NNNNN*

1 Letter-1 Number	1 Letter-2 Numbers	1 Letter-3 Numbers	1 Letter-4 Numbers
NL*	LNN*	LNNN*	LNNNN*
LN*	NLN*	NLNN	NLNNN
	NNL*	NNLN	NNLNN
		NNNL	NNNLN
			NNNNL

	2 Letters-1 Number	2 Letters-2 Numbers	2 Letters-3 Numbers
	LLN*	LLNN*	LLNNN*
	NLL*	NLLN*	NLLNN
	LNL*	NNLL*	NNLLN
		LNNL	NNNLL
		LNLN	LNNNL*
		NLNL	NLNLN
			LNLNN
			LNNLN
			NNLNL
			NLNNL

		3 Letters-1 Number	3 Letters-2 Numbers
		LLLN*	LLLNN*
		NLLL	NLLLN
		LNLL	NNLLL
		LLNL	LLNNL*
			LNNLL
			LNLLN
			LNLNL
			NLNLL
			NLLNL
			LLNLN

		4 Letters-1 Number	
		NLLLL*	
		LNLLL*	
		LLNLL*	
		LLLNL*	
		LLLLN*	

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